

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL.

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

June 9, 2003

Christopher B. Fisher, Esq. Cuddy & Feder LLP 90 Maple Avenue White Plains, NY 10601-5196

RE: EM-AT&T-046-030519 - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 275 North Street, Easton, Connecticut.

Dear Attorney Fisher:

At a public meeting held on June 3, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received in our office on May 19, 2003. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours.

Paul C

Chairman

PBK/laf

c: Honorable William J. Kupinse, First Selectman, Town of Easton Planning and Zoning Official, Town of Easton Sheila R. Becker, Regional Director of Compliance, SBA, Inc. Thomas J. Regan, Esq., Brown Rudnick Berlack Israels, LLP Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae LLP Sandy M. Carter, Verizon Wireless

EXISTING TELECOMMUNICATIONS FACILITY AT MAY 19 2003 275 NORTH STREET, EASTON, CONNECTICUT STring Council

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 275 North Street, Easton, Connecticut (the "North Street Facility"), owned by SBA. AT&T Wireless and SBA have agreed to share the use of the North Street Facility, as detailed below.

The North Street Facility

The North Street Facility consists of an approximately one hundred ninety (190) foot "tree" monopole tower and associated equipment currently being used or proposed for wireless communications use by Sprint, Omnipoint and Verizon.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Natcomm, LLC, including a site plan and tower elevation of the North Street Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets at grade needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 155 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on the existing concrete foundation within the fenced compound. As evidenced in the structural evaluation prepared by Paul J. Ford and Company, annexed hereto as Exhibit A, the tower was designed for and is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

The proposed addition of AT&T Wireless' antennas and equipment to the North Street Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the tower will not result in an increase of the tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the tower site's boundary. As set forth in an Emissions Report prepared by Vishal Kataria, RF Engineer, annexed hereto as Exhibit B, the total radio frequency electromagnetic radiation power density at the tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition

of AT&T Wireless' facility to the tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

Conclusion

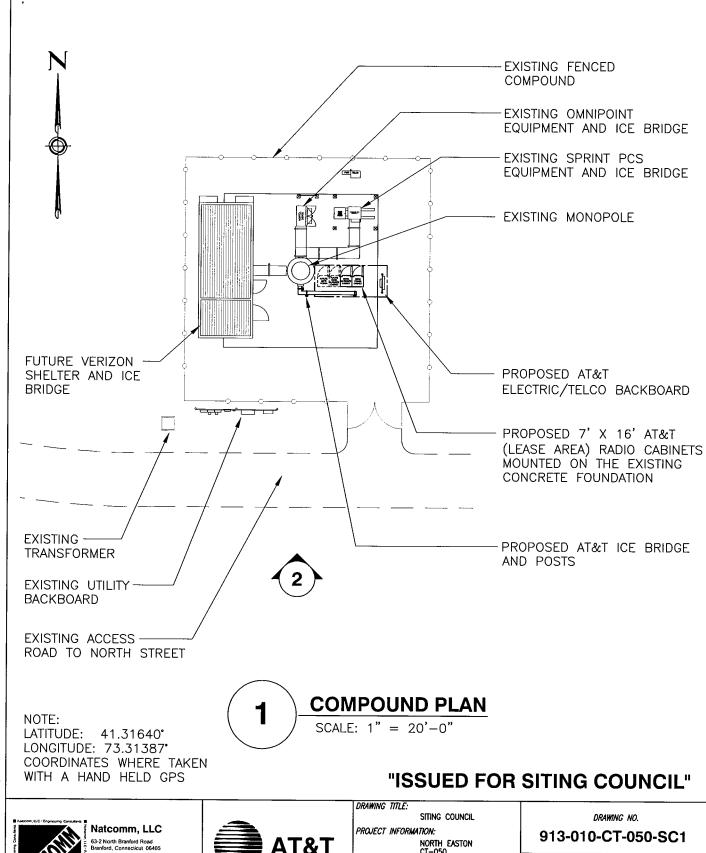
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the North Street Facility meets the Council's exemption criteria.

Respectfully Submitted,

Christopher B. Fisher, Esq. On behalf of AT&T Wireless

cc: William J. Kupinse, First Selectman, Town of Easton

Johnny R. Salmon, Bechtel Derek Fergus, Optasite



EST Ę 3:08



Tel. (203) 488-0580 Fax (203) 488-8587

Consulting Engineers - Project Management Civil - Structural - Mechanical - Electrical



AT&T

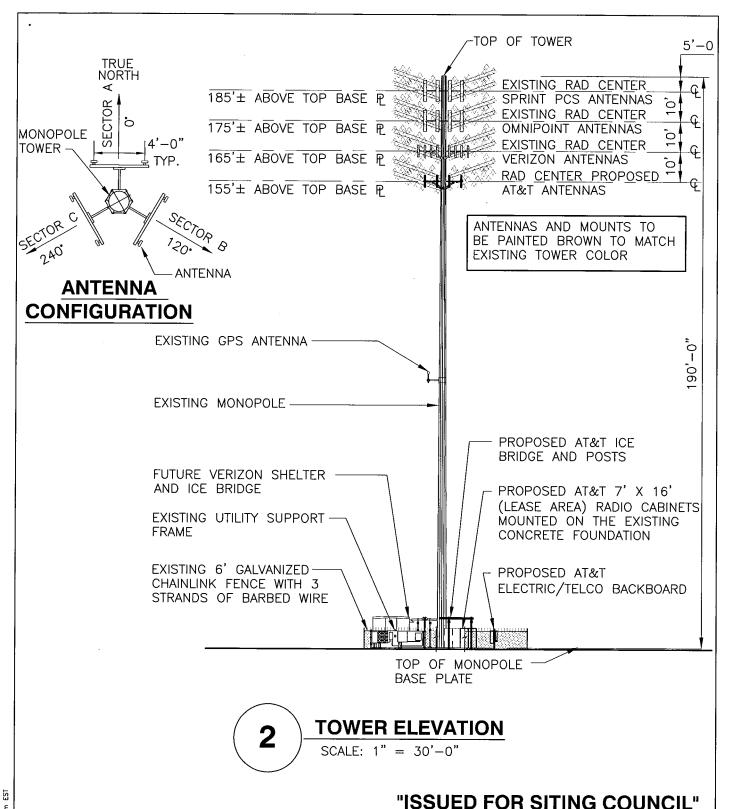
AT&T WIRELESS PCS LLC 12 OMEGA DRIVE STAMFORD, CONNECTICUT 06907

NORTH EASTON CT-050 275 NORTH STREET EASTON, CT 06612

LESSOR:

SBA 125 SHAW STREET NEW LONDON, CT

REVISION NO.	0	DRAWN BY:	PAM.
DATE ISSUED:	05/14/03	CHECKED BY:	NP
SCALE:	AS NOTED	APPROVED BY:	OFC .
		SHEET NO. 1	0F 2
A/E PROJECT NO: 03016			



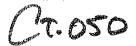




DRAWING TIT	LE:		
	SITING COUNCIL	Di	RAWING NO.
PROJECT INF	<i>Tormation:</i> North Easton CT-050	913-010-	-CT-050-SC2
	275 NORTH STREET	REVISION NO. 0	DRAWN BY: P.A.M.
	EASTON, CT 06612	DATE ISSUED: 05/14/03	CHECKED BY: JJP
ESSOR:	004	SCALE: AS NOTED	APPROVED BY: CFC
	SBA 125 SHAW STREET		SHEET NO. 2 OF 2
	NEW LONDON, CT	A/E PROJECT NO:	03016

03016LE2.dwg 05-14-03 3:08: pm E

TRUX



DESIGN WIND



185'-0"

<u>165°-0</u>" 444

. Andrew

155'-0"

100'-2"

54'-0"

0<u></u>

10543 Fisher Road, Building E Houston, Texas 77041 Phone: (713) 937-7773 Fax: (713) 937-6264

> PINE BRANCHES BY CONCEALMENT

BRANCHES SHOWN FOR

ILLUSTRATIVE PURPOSES

ONLY. NOT TO SCALE.

CONCEPTS

21.375" ACROSS FLATS

. Name

SPLICE LENGTH

MIN = 46.80 DESIGN = 52.00 MAX 2 = 57.00"

> SPLICE LENGTH MIN = 65.70" DESIGN = 73.00" MAX = 78.00"

SPLICE LENGTH MIN

MAX

= 84.60" DESIGN = 94.00"

= 99.00°

P_ 7/16" X 54.00' (Fy=65) (EST WT = 16.409 KIPS)

R 3/8" X 54.00' (Fy=65) (EST WT = 8.525 KIPS)

문 7/16" X 54.00' (Fy=65) (EST WT = 13.249 KIPS)

R 3/16" X 41.25' (Fy=65) (EST WT = 2.265 KIPS)



CASE 1 85 MPH WITH NO ICE

PAUL J. FORD AND COMPANY STRUCTURAL ENGINEERS 250 East Broad Street, Suite 500, Columbus, Ohio 43215 (614) 221-6679 Fax: (614) 221-0166 www.PJFweb.com

	DATA	
	Job No.	20099-146
RKT	Design No.	08-10-1999
	Rev. No. Rev. Date	00 10 1333
185-FT PINE TREE		
4277: 275 NORTH ST	., EASTON, CT	
SBA, INC.	·······	
Design 85 MPH/74 MPH + 1/2" RADIAL ICE ACCORDING TO TIA/EIA-222-F 1996		
	RKT DWH V 185-FT PINE TREE 4277: 275 NORTH ST BBA, INC.	Design No. Dote Rev. No. Rev. Date 185-FT PINE TREE 14277: 275 NORTH ST., EASTON, CT

CASE 2 74 MPH CASE 3 50 MPH	WITH 1/2" RADIAL ICE REDUCED WIND WITH ICE OPERATIONAL WIND
P 0	LE SPECIFICATIONS
	18-SIDED POLYGON
Taper:	0.287162 IN/FT
Shaft Steel:	ASTM A572 GRADE 65
Base PL Steel:	ASTM A572 GRADE 50 (50 KSI)
Anchor Bolts:	2 1/4"ø x 7'-0" LONG #18J ASTM A615 GRADE 75

CASES

LOAD

		ANTENNA	LIST
No.	Elev.	Description	
1-12	185.00	(12) DB874H PANEL	
-	185.00	(3) 6-FT CURVED ARM MOUNT	
	185.00	6' LIMBS	
-	179.50	6' LIMBS	
13-24	175.00	(12) DB874H PANEL	ANNE STORY
-		(3) 6-FT CURVED ARM MOUNT	11/36 C 2 1/2 1
_		Ż'LIMBS	- 3.2 Margar 9.33
-	169.50	8' LIMBS	- SANWER 2000 63 1
	165.00	(3) 6-FT CURVED ARM MOUNT	三元 李 新麗 多 5 5 1
25-36	165.00	(12) DB874H PANEL	
-		8' LIMBS	
_	159.50	9' LIMBS	ED: No. 17891
37-48	155.00	(12) D8874H PANEL	
-		(3) 6-FT CURVED ARM MOUNT	SACCENS OF WILLIAM
_	154.50		5.0000 ET 111 11
- i	149.50		WINDS A WING
49-60			OENSE ONAL
-	145.00		$M_{\sim} \sim 10^{\circ}$
_	144.50		110000

STEP BOLTS FULL HEIGHT FROM 9'-6" ABOVE BASE PLATE. ANTENNA FEED LINES RUN INSIDE OF POLE.

	85 M	PH WIND	50 M	PH WIND
Elevation	Lateral Deflection (Inches)	Rotation (sway) (degrees)	Lateral Deflection (Inches)	Rotation (sway) (degrees)
TOP	145.0	7,374	50.0	2,551

	SH	AFT SEC	TION	DATA	
Shaft Section	Section Length	Plate Thickness	Lap Splice		cross Flats hes)
300	(feet)	(in.) ·	(in.)	@ Top	@ Battom
1	41.25	0.1875	52.00	21.375	33.220
2	54.00	0.3750	73.00	31,601	47,108
3	54.00	0.4375		44.611	60,118
4	54.00	0.4375	94.00	56.993	72.500
NOTE:	DIMENSIONS	SHOWN DO NO	T INCLUDE	GAL VANIZING	TOLERANCES

BASE REACTIONS FOR FOR FOUNDATION DESIGN 275 10 42.00 Marin Vita

CM. South a daile of Manage and it appear

BASE R 3-1/2" X 78.625" SCHARE (WT. = 5.293 KIPS) W/(24) 2.25" ANCHOR POLIS ON 79.875" BC. STELLIS LISTED WEST TO THE STELLIS OF TEMPORAL PROPERTY AND THE STELLIS OF THE STELLIS OF TEMPORAL PROPERTY AND THE STELLIS OF THE STELL

72.500" ACROSS FLATS

0,-0,

I/FDN



#4277

SBA, INC.

Pole

Site

Owner

Design

.9

Location

185 FT MONOPOLE

EASTON, CONNECTICUT

85 MPH/74 MPH + 1/2" RADIAL ICE

10543 Fish 'load, Building E Housson, Texas 77041 Phone: (713) 937-7773

Phone: (713) 937-7773 Fax: (713) 937-6264 PAUL J. FORD AND COMF STRUCTURAL ENGINEE 250 East Broad Street, Suite 500, Columbus, Ohio (614)-221-6679 FAX (614)-221-6

Page	2	Of	2
Ву	RKT	Date	08-10-1999
Sterling Jo	b No	PJF No	20099-146
Revision No	o	Date	
According to TIA/EIA-222-F 1996			

POLE SHAFT & BASE PL-POLE & FOUNDATION ANCHOR BOLTS-DOUBLE HEAVY HEX NUT W/WASHER 12" PROJ. HEAVY HEX #11 @ 12"% EA LEVELING NUT 3" GAP WAY TOP AND BOT W/ WASHER (GROUT NOT REQUIRED) EXISTING GRAD <u>Ţ/ŘÔ</u>ČŔ^{ŚŚŚ} A.B. TEMPLATE -5'-0" HVY HEX NUTS MIN TYP ರ 6" MIN OVEREXCAVATE TO (12)-#8['] ADD'L EACH WAY **CLEAR** ACCOMMODATE ANCHOR BOLT LENGTH AS REQ'D 9'-0" MIN SQUARE 33'-0" SQUARE MAT

FOUNDATION SHALL BEAR
ON NATIVE BEDROCK
WITH A MINIMUM ALLOWABLE
BEARING CAPACITY = 40000 PSF
(REFER TO GEOTECHNICAL REPORT.

No. 17891

MAT FOUNDATION

NOTES:

- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF AT LEAST 3000 PSI AT 28 DAYS.
- 2. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (GRADE 60)
- 3. SEE PAGE 1 FOR ANCHOR BOLT QUANTITY, SIZE, LENGTH, AND BOLT CIRCLE
- 4. TOTAL CONCRETE = 169 CUBIC YARDS.
- 5. FOUNDATION DESIGN BASED UPON GEOTECHNICAL EXPLORATION

REPORT PREPARED BY:

JAWORSKI GEOTECH, INC.

REPORT NO:

C98404G

COMPARE REAL HE DECITED HICAL HERE ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.

| 10-AUG-1899 | 12:53

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RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 913-010-050

May 15,2003

Prepared by AT&T Wireless Services, Inc. Vishal Kataria RF Engineer

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1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 197 North Street, Easton, CT. This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: Easton North	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	155.00 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility¹:

$$PowerDensity = \frac{0.64 * N * EIRP(\theta)}{\pi * R^2} (mW/cm^2)$$
 Eq. 1-Far-field

Where, N= Number of channels, R= distance in cm from the RC (Radiation Center) of antenna, and $EIRP(\theta) =$ The isotropic power expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

$$PowerDensity = \frac{P_{in} / ch * N * 10^{3}}{2 * \pi * R * h * \alpha / 360} (mW/cm^{2})$$
 Eq. 2-Near-field

Where P_{in}/ch = Input power to antenna terminals in watts/ch, R = distance to center of radiation, h = aperture height in meters, α = 3 dB beam-width of horizontal pattern.

¹ RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μ W), a millionth of a watt, per square centimeter (cm²). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Emissions

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites. ² Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density for AT&T system is 0.000403 mW/cm² at the antenna facility. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF Emissions

Frequency	Public/Uncontrolled	Occupational/controlled	Maximum power density at Accessible location
Cellular	.580 mW/cm ²	2.9 mW/cm ²	0.000403 mW/cm ²
PCS	1 mW/cm ²	5 mW/cm ²	

The maximum power density at the proposed facility represents only 0.04% of the public MPE limit for PCS frequencies. As other transmitters are also located at this site, I have taken the findings of the most recent Siting Council filing on this site dated July 12,2002 and added that exposure to ours as shown in Exhibit A. I find that the total values are 7.35% of the Maximum Permissible Exposure for uncontrolled populations.

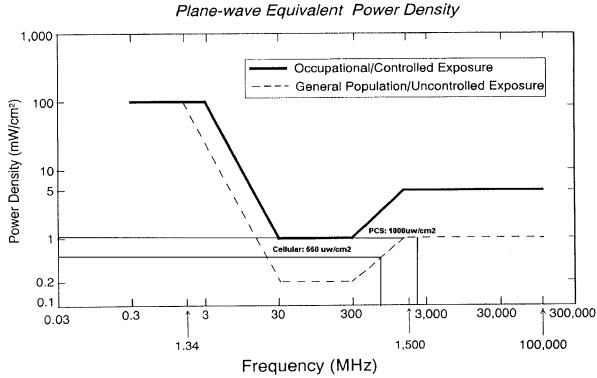
6. Conclusion

This analysis show that the maximum power density Percentage in accessible areas at this location is 7.35%, a level of RF energy that is below the Maximum Permissible Exposure limit established by the FCC.

² 47 U.S. C. Section 332 (c) (7)(B)(iv) states that "[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

7. FCC Limits for Maximum Permissible Exposure

FCC Limits for Maximum Permissible Exposure (MPE)



AT&T Wireless Services, Inc.

8. Exhibit A





Power Density Analysis for CT-050

Working with data from current filing:

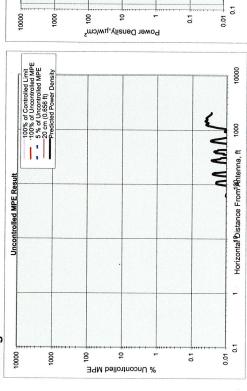
SI. No.	Carrier System	% MPE
1	Total % MPE for Verizon	4.08
2	Total % MPE for Sprint	2.59
3	Total % MPE for T-Mobile	0.72

	EXISTING TOTAL % MPE	7.31
4	% MPE FROM AT&T Wireless system	0.04
T	70 till E i itom /tra i villeless system	0.04
	TOTAL (PROPOSED) % MPE	7.35

Prepared by:

Vishal Kataria RF Engineer, Bechtel Telecommunications AT&T Wireless Services, Inc.





100% of Controlled Limit
100% of Uncontrolled FCC Limit
5 % of Uncontrolled FCC Limit
20 on (.656 ft)
Fredicted Power Density

Antenna System One

Number of Antenna Systems: 1 Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

@Horiz. Dist.	feet	1400.00		
Power Density	% of limit	0.04	environment	Watts
Powe	mW/cm ²	0.000403	or uncontrolled	3,000.00
		Maximum Power Density =	2,478.84 times lower than the MPE limit for uncontrolled environment	Composite Power (ERP) =

		set	
Site ID: 913-010-050	Easton North	197 North Stree	aston,CT
Site ID:	Site Name: E	Site Location: 1	ш

Kataria	15/2003
Vishal	5/15
Performed By:	Date:
Perfo	

Antenna System One

10000

10 100 1000 Horizontal Distance from Antenna, ft

Ant System ONE Owner: AT&T Sector: 3 Azimuth: 0/120/240

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland Federal Communications Commission Office of Engineering and Technology Washington, DC 20554

RF Safety Program: 202-418-2464 Internet address: rfsafety@fcc.gov

RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

- [1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).
- [2] Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).
- [3] Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).
- [4] Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.
- [5] Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields, OET Bulletin 65, August, 1997.

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